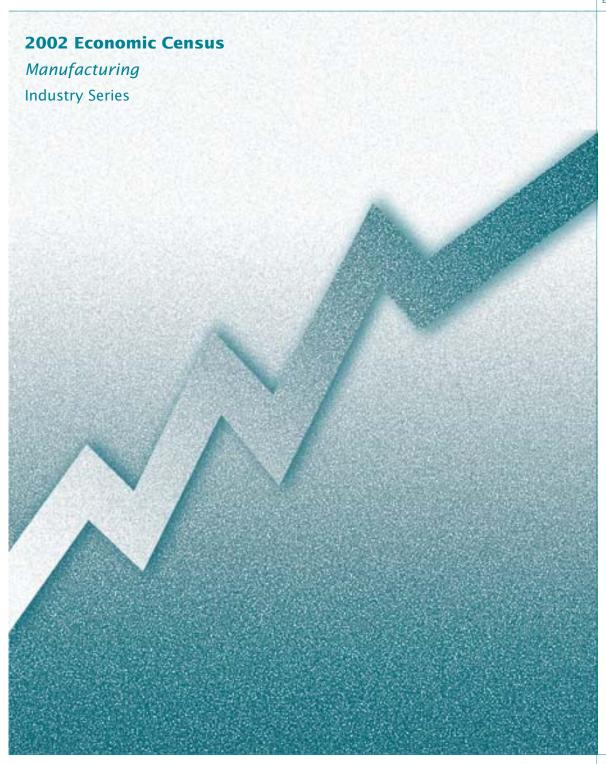
# Industrial Process Furnace and Oven Manufacturing: 2002

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Helping You Make Informed Decisions

U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU



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-- Not applicable for this report.

#### Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

|  |                             |     |                     |                      | Pro                 | duction work     | kers               |                             | Total     | Total     | Total capital                  |
|--|-----------------------------|-----|---------------------|----------------------|---------------------|------------------|--------------------|-----------------------------|-----------|-----------|--------------------------------|
| Industry and year <sup>1</sup>         | Com-<br>panies <sup>2</sup> |     | Number <sup>4</sup> | Payroll<br>(\$1,000) | Number <sup>4</sup> | Hours<br>(1,000) | Wages<br>(\$1,000) | Value<br>added<br>(\$1,000) | materials | shipments | expendi-<br>tures<br>(\$1,000) |
| 333994, Industrial process furnace and |                             |     |                     |                      |                     |                  |                    |                             |           |           |                                |
| oven manufacturing2002                 | 328                         | 354 | 11 571              | 474 488              | 6 677               | 13 085           | 205 475            | 935 181                     | 690 101   | 1 634 967 | r37 182                        |
| 2001                                   | N                           | N   | 15 294              | 622 605              | 9 089               | 17 593           | 265 904            | 1 116 749                   | 1 077 508 | 2 267 022 | 47 499                         |
| 2000                                   | N                           | N   | 16 345              | 632 925              | 10 026              | 20 140           | 289 060            | 1 330 538                   | 1 249 553 | 2 595 299 | 74 671                         |
| 1999                                   | N                           | N   | 16 834              | 624 847              | 9 813               | 20 420           | 287 059            | 1 212 480                   | 1 159 541 | 2 413 765 | 100 501                        |
| 1998                                   | N                           | N   | 17 929              | 670 345              | 11 061              | 24 626           | 325 798            | 1 439 927                   | 1 324 851 | 2 685 900 | 46 774                         |
| 1997                                   | 378                         | 404 | 17 575              | 657 327              | 10 313              | 23 295           | 288 549            | 1 514 761                   | 1 365 736 | 2 869 912 | 65 381                         |

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

#### Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

|  |                                      | All establishments <sup>2</sup>                              |  | All employees   |   | Production workers   |   |  |  |   |   |   |
|--|--------------------------------------|--|--|---|---|--|---|--|--|---|---|---|
| Industry and geographic area   | E¹                                   | Total  | With 20<br>em-<br>ploy-<br>ees or<br>more                      | Number <sup>3</sup>   | Payroll<br>(\$1,000)  | Number <sup>3</sup>  | Hours<br>(1,000)  | Wages<br>(\$1,000)   |  | Total<br>cost of<br>materials<br>(\$1,000)    | Total<br>value of<br>shipments<br>(\$1,000)   | Total<br>capital<br>expendi-<br>tures<br>(\$1,000)  |
| 333994, Industrial process furnace and oven manufacturing  |                                      |  |  |   |   |  |   |  |  |   |   |   |
| United States. California Connecticut Illinois Indiana Massachusetts Michigan Minnesota Missouri New Jersey Oklahoma Texas | 2<br>3<br>1<br>5<br>1<br>2<br>2<br>- | 354<br>35<br>6<br>20<br>14<br>16<br>34<br>7<br>11<br>19<br>7 | 143<br>10<br>1<br>10<br>6<br>6<br>13<br>3<br>9<br>10<br>4<br>5 | 11 571<br>639<br>110<br>1 022<br>422<br>604<br>948<br>282<br>1 142<br>723<br>278<br>321 | 474 488<br>26 925<br>3 399<br>41 711<br>17 272<br>25 823<br>41 312<br>17 458<br>38 001<br>34 069<br>12 393<br>9 887 | 6 677<br>392<br>66<br>621<br>247<br>338<br>591<br>102<br>674<br>330<br>194 | 13 085<br>762<br>118<br>1 282<br>495<br>522<br>1 198<br>203<br>1 326<br>561<br>396<br>376 | 205 475<br>11 793<br>1 401<br>20 027<br>6 965<br>10 547<br>19 583<br>3 997<br>17 676<br>12 662<br>6 847<br>5 701 | 53 888<br>5 691<br>111 213<br>37 933<br>40 117<br>77 721<br>20 150<br>80 290 | 5 943<br>64 316<br>25 788<br>23 709<br>61 688 | 1 634 967<br>91 605<br>11 633<br>172 503<br>62 411<br>64 986<br>143 157<br>39 245<br>113 361<br>136 549<br>38 098<br>32 799 | r37 182<br>r1 956<br>92<br>r3 550<br>r937<br>r463<br>r6 192<br>r778<br>r2 139<br>r1 022<br>r870<br>r908 |

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

Includes establishments with payroll at any time during the year.

Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

#### Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| Item   | Value   |
|--|---|
| 333994, Industrial process furnace and oven manufacturing  |   |
| Companies <sup>1</sup> number  | 328   |
| All establishments <sup>2</sup>  | 354<br>211<br>115<br>28   |
| All employees³         number.           Total compensation         \$1,000.           Annual payroll         \$1,000.           Total fringe benefits         \$1,000.  | 11 571<br>578 694<br>474 488<br>104 206   |
| Production workers, average for year   | 6 677<br>6 826<br>6 651<br>6 666<br>6 543   |
| Production worker hours  | 13 085<br>205 475   |
| Total cost of materials         \$1,000           Materials, parts, containers, packaging, etc., used         \$1,000           Resales         \$1,000           Purchased fuels         \$1,000           Purchased electricity         \$1,000           Contract work         \$1,000  | 690 101<br>573 668<br>75 918<br>3 657<br>11 720<br>25 138                                       |
| Quantity of electricity purchased for heat and power. 1,000 kWh.  Quantity of electricity generated less sold for heat and power . 1,000 kWh.  | 174 184<br>-  |
| Total value of shipments         \$1,000           Primary products value of shipments         \$1,000           Secondary products value of shipments         \$1,000           Total miscellaneous receipts         \$1,000           Value of resales         \$1,000           Contract receipts         \$1,000           Other miscellaneous receipts         \$1,000  | 1 634 967<br>1 403 977<br>80 867<br>150 123<br>112 217<br>22 901<br>15 005                      |
| Primary products specialization ratio percent.  Value of primary products shipments made in all industries \$1,000.  Value of primary products shipments made in this industry \$1,000.  Value of primary products shipments made in other industries \$1,000.   | 95<br>1 512 249<br>1 403 977<br>108 272   |
| Coverage ratio percent   | 93  |
| Value added  | 935 181   |
| Total inventories, beginning of year         \$1,000.           Finished goods inventories         \$1,000.           Work-in-process inventories         \$1,000.           Materials and supplies inventories         \$1,000.   | 292 983<br>47 565<br>94 601<br>150 817  |
| Total inventories, end of year         \$1,000.           Finished goods inventories         \$1,000.           Work-in-process inventories         \$1,000.           Materials and supplies inventories         \$1,000.   | 251 438<br>44 551<br>87 930<br>118 957  |
| Gross value of depreciable assets (acquisition costs) at beginning of year         \$1,000           Total capital expenditures (new and used)         \$1,000           Buildings and other structures (new and used)         \$1,000           Machinery and equipment (new and used)         \$1,000           Automobiles, trucks, etc., for highway use         \$1,000           Computers and peripheral data processing equipment         \$1,000           All other expenditures for machinery and equipment         \$1,000           Total retirements         \$1,000           Gross value of depreciable assets at end of year         \$1,000  | '579 131<br>'37 182<br>'7 872<br>'29 310<br>'1 756<br>'4 542<br>'23 012<br>'46 554<br>'569 759  |
| Depreciation charges during year\$1,000.   | '35 652   |
| Total rental payments         \$1,000           Buildings and other structures         \$1,000           Machinery and equipment         \$1,000   | 29 926<br>22 426<br>7 500   |
| Total other expenses <sup>4</sup> \$1,000.  Response coverage ratio <sup>5</sup> percent.  Repair and maintenance services of buildings and/or machinery <sup>4</sup> \$1,000.  Communications services <sup>4</sup> \$1,000.  Legal services <sup>4</sup> \$1,000.  Accounting, auditing, and bookkeeping services <sup>4</sup> \$1,000.  Advertising and promotional services <sup>4</sup> \$1,000.  Expensed computer hardware and supplies and purchased computer services <sup>4</sup> \$1,000.  Refuse removal (including hazardous waste) services <sup>4</sup> \$1,000.  Management consulting and administrative services <sup>4</sup> \$1,000.  Taxes and license fees <sup>4</sup> \$1,000.  All other expenses <sup>4</sup> \$1,000. | 167 060<br>85<br>7 357<br>6 058<br>5 049<br>2 552<br>10 760<br>3 671<br>1 939<br>5 307<br>7 814 |

<sup>1</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.
2Includes establishments with payroll at any time during the year.
3Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.
4Based on 2002 Annual Survey of Manufactures (ASM) sample data.
5A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

#### Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

| Employment size class   |                                 | All employees  |   |   | Pr   | oduction worke   | ers   |  | Total  | Total  | Total<br>capital   |
|---|---------------------------------|--|---|---|--|--|---|--|--|--|--|
|   |                                 | All estab-<br>lish-<br>ments <sup>2</sup>              | Number <sup>3</sup>   | Payroll<br>(\$1,000)  | Number <sup>3</sup>  | Hours<br>(1,000)   | Wages<br>(\$1,000)  | Value<br>added<br>(\$1,000)  | cost of<br>materials<br>(\$1,000)                                  | value of<br>shipments<br>(\$1,000)   | expendi-<br>tures<br>(\$1,000)   |
| 333994, Industrial process furnace and oven manufacturing   |                                 |  |   |   |  |  |   |  |  |  |  |
| All establishments  Establishments with — 1 to 4 employees 5 to 9 employees 10 to 19 employees 20 to 49 employees 100 to 249 employees 250 to 499 employees 250 to 499 employees 250 to 499 employees 1,000 to 2,499 employees 1,000 to 2,499 employees 2,500 employees or more | 9<br>6<br>2<br>1<br>1<br>-<br>- | 354<br>88<br>55<br>68<br>70<br>45<br>24<br>4<br>-<br>- | 11 571<br>197<br>386<br>905<br>2 268<br>3 057<br>3 408<br>1 350 | 474 488<br>7 862<br>17 862<br>39 627<br>96 374<br>128 797<br>142 669<br>41 297<br>— | 6 677<br>120<br>223<br>500<br>1 336<br>1 725<br>1 814<br>959<br>-<br>- | 13 085<br>208<br>435<br>935<br>2 691<br>3 452<br>3 517<br>1 847<br>— | 205 475<br>3 345<br>7 207<br>17 301<br>43 492<br>52 963<br>57 322<br>23 845 | 935 181<br>11 236<br>36 715<br>82 041<br>186 729<br>287 601<br>233 593<br>97 266 | 690 101  14 258 30 886 64 899 147 694 211 020 192 605 28 739 — — — | 1 634 967<br>29 397<br>67 387<br>148 695<br>333 494<br>501 495<br>429 071<br>125 428 | '37 182<br>'514<br>'1 166<br>'1 920<br>'6 620<br>'11 526<br>'13 076<br>2 360 |
| Administrative records <sup>4</sup>   | 9                               | 125  | 486   | 20 958  | 291  | 559  | 8 807   | 40 929   | 37 083   | 78 014   | <sup>r</sup> 1 455   |

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

¹Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

#### Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

| Industry or           | Industry or primary product class  | All<br>estab-<br>lish-<br>ments <sup>1</sup> | All employees       |                      | Pr                  | oduction work    | ers                |                             | Total                             | Total                              | Total<br>capital               |
|-----------------------|--|--|---------------------|----------------------|---------------------|------------------|--------------------|-----------------------------|-----------------------------------|------------------------------------|--------------------------------|
| product<br>class code |  |  | Number <sup>2</sup> | Payroll<br>(\$1,000) | Number <sup>2</sup> | Hours<br>(1,000) | Wages<br>(\$1,000) | Value<br>added<br>(\$1,000) | cost of<br>materials<br>(\$1,000) | value of<br>shipments<br>(\$1,000) | expendi-<br>tures<br>(\$1,000) |
| 333994                | Industrial process furnace and oven manufacturing                        | 354  | 11 571              | 474 488              | 6 677               | 13 085           | 205 475            | 935 181                     | 690 101                           | 1 634 967                          | '37 182                        |
| 3339940               | Industrial furnaces and ovens, and electric industrial heating equipment | 354  | 11 571              | 474 488              | 6 677               | 13 085           | 205 475            | 935 181                     | 690 101                           | 1 634 967                          | r37 182                        |

<sup>&</sup>lt;sup>1</sup>Includes establishments with payroll at any time during the year.

<sup>2</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

#### Products Statistics: 2002 and 1997 Table 6a.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| Drodust         |   | Number of companies with             |   | Product shipments |                                 |  |
|-----------------|---|--------------------------------------|---|-------------------|---------------------------------|--|
| Product<br>code | Product   | shipments of<br>\$100,000<br>or more | Quantity of<br>production for<br>all purposes | Quantity          | Value<br>(\$1,000)              |  |
| 333994          | Industrial process furnace and oven manufacturing   | N<br>N                               | X   | X                 | 1 512 249<br>2 861 613          |  |
| 3339940         | Industrial furnaces and ovens, and electric industrial heating equipment  | Ŋ                                    | x   | x                 | 1 512 249                       |  |
| 33399401        | Fuel-fired industrial process furnaces, ovens, and kilns  | N<br>N<br>N                          | X<br>X<br>X                                   | X<br>X<br>X       | 2 861 613<br>377 594<br>589 647 |  |
| 3339940103      | Fuel-fired industrial metal processing and heat treating furnaces (including annealing, hardening, carburizing, and porcelain enameling furnaces), except parts and attachments                   | 51                                   | x   | X                 | 247 474                         |  |
| 3339940106      | Fuel-fired metal processing and heat treating furnaces, ovens, and kilns for the melting, roasting, and all other heat treatment of ores, pyrites, or metals, except parts and                    | 61                                   | X   |                   | 289 129                         |  |
| 3339940109      | attachments   | 21<br>25                             | X   | X<br>X            | 52 780<br>60 253                |  |
| 33399402        | and kilns   | 34<br>42                             | X   | X                 | 77 340<br>240 265               |  |
|                 | ovens, and kilns  | N<br>N                               | X<br>X  | X                 | 109 357<br>75 470               |  |
| 3339940214      | Parts and attachments for industrial fuel-fired furnaces, ovens, and kilns  | 46<br>48                             | X   | X                 | 109 357<br>75 470               |  |
| 33399403        | High-frequency induction and dielectric heating equipment, including furnaces, ovens, and kilns (except parts and attachments)  | N                                    | x   |                   | 167 508                         |  |
| 3339940323      | High-frequency induction and dielectric heating equipment, including furnaces, ovens, and kilns (except parts and attachments)  | N<br>28                              | x x   | X<br>X            | 209 880<br>167 508              |  |
| 33399404        | Electric resistance-heated furnaces, ovens, and kilns (except   | 33                                   | ×   | X<br>X            | 209 880                         |  |
| 3339940429      | parts and attachments)  | N<br>N                               | X   | X                 | 113 488<br>246 968              |  |
| 3339940431      | and porcelain enameling (except parts and attachments)  | 36<br>56                             | X   | X                 | 58 506<br>167 902               |  |
| 33399405        | parts and attachments)  | 20<br>30                             | X   | X<br>X            | 54 982<br>79 066                |  |
| 3339940535      | resistance-heated) metal processing and heat treating furnaces (except parts and attachments)   | N<br>N                               | X   | ×                 | 31 863<br>184 371               |  |
| 3339940333      | Electric (except high-frequency induction and dielectric and resistance-heated) metal processing and heat treating furnaces (except parts and attachments)  | 14<br>23                             | ×   | ×                 | 31 863<br>184 371               |  |
| 33399406        | Other electric industrial furnaces, ovens, and kilns (complete units)   | N<br>N                               | X   | X<br>X            | 104 942<br>546 983              |  |
| 3339940639      | Electric (except high-frequency induction and dielectric and resistance-heated) furnaces and ovens for diffusion, oxidation, and annealing of semiconductor wafers (except parts and attachments) | 12                                   | x   | x                 | 20 317                          |  |
| 3339940653      | All other miscellaneous electric industrial furnaces, ovens, and kilns (except parts)   | 29<br>29                             | X X   | x<br>x            | 267 271<br>84 625               |  |
| 33399407        | Parts and attachments for electric industrial furnaces, ovens, and kilns, including high-frequency induction and dielectric heating equipment   | 43                                   | X   | X                 | 279 712                         |  |
| 3339940759      | Parts and attachments for electric industrial furnaces, ovens and kilns including high-frequency induction and  | N<br>N                               | X<br>X  | X                 | 92 121<br>114 498               |  |
| 33399408        | dielectric heating equipment  | 50<br>71                             | X   | X                 | 92 121<br>114 498               |  |
| 3339940871      | parts and attachments for soldering irons   | N<br>N<br>19                         | X<br>X<br>X                                   | X<br>X<br>X       | 267 375<br>520 608<br>99 653    |  |
| 3339940875      | All other miscellaneous electrical heating equipment for  | 30                                   | x̂  | â                 | 109 758                         |  |
|                 | industrial use, except parts and attachments and soldering irons  | 24<br>53                             | X   | X                 | 167 722<br>410 850              |  |
| 33399409        | Parts and attachments for electric industrial tubular heaters and all other miscellaneous electrical heating equipment for industrial use   | N<br>N                               | X<br>X  | X<br>X            | 86 285<br>72 560                |  |
| 3339940979      | Parts and attachments for electric industrial tubular heaters and all other miscellaneous electrical heating equipment for industrial use   | 24                                   | x   | x                 | 86 285                          |  |
| 3339940Y        | Industrial furnaces and ovens, and electric industrial heating equipment, nsk, total  | 35<br>N<br>N                         | X<br>X<br>X                                   | X<br>X<br>X       | 72 560<br>161 716<br>300 628    |  |
| 3339940YWW      | Industrial furnaces and ovens, and electric industrial<br>heating equipment, nsk, for nonadministrative-record<br>establishments  | N                                    | x   | X<br>X            | 90 943                          |  |
| 3339940YWY      | Industrial furnaces and ovens, and electric industrial heating equipment, nsk, for administrative-record establishments   | N<br>N                               | x<br>x  |                   | 258 301<br>70 773               |  |
|                 | 1997  | Ň                                    | x   | X                 | 42 327                          |  |

See footnotes at end of table.

#### Table 6a. Products Statistics: 2002 and 1997—Con.

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

## Table 6b. Product Class Shipments for Selected States: 2002 and 1997

[Not applicable for this report.]

### Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| Material code | Material consumed   | Quantity    | Delivered cost<br>(\$1,000)  |
|---------------|---|-------------|------------------------------|
| 333994        | Industrial process furnace and oven manufacturing   |             |                              |
| 00900001      | Total materials   | X           | 573 668                      |
| 00190090      | 1997   Fluid power products   | X           | 1 180 320<br>19 663          |
| 33200005      | Fabricated metal products, including forgings   | X<br>X<br>X | 102 779<br>45 871<br>141 752 |
| 33151001      | Iron and steel castings (rough and semifinished)  | X           | 14 588<br>14 134             |
| 33152011      | Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)   | x X         | 6 226<br>17 548              |
| 33120007      | Steel bars, bar shapes, and plate (excluding castings, forgings, and fabricated metal products)                 | X<br>X      | 15 663<br>47 977             |
| 33120016      | Steel sheet and strip (including tinplate)  | X           | 13 128<br>N                  |
| 33120033      | All other steel shapes and forms (excluding castings, forgings, and fabricated metal products)                  | X<br>X      | 10 051<br>28 887             |
| 33100077      | Other nonferrous shapes and forms (excluding castings, forgings, and fabricated metal products)                 | X           | 11 871<br>28 768             |
| 33100038      | Aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) | X           | 2 193                        |
| 001900B1      | Electrical transmission, distribution, and control equipment  | X           | N<br>42 786                  |
| 33399400      | Electric heating elements for industrial furnaces, ovens, and kilns   | X<br>X<br>X | 151 769<br>37 987<br>38 858  |
| 00970099      | All other materials and components, parts, containers, and supplies   | X           | 122 626<br>452 590           |
| 00971000      | Materials, ingredients, containers, and supplies, nsk   | X<br>X      | 231 015<br>155 258           |

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.